Appln. No. 10/784,348 Amendment Dated February 22, 2007 Reply to Notice of Non-Compliant Amendment of February 5, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of producing a photocatalyst having comprising a carrier carrying titania and metal with having a property of exhibiting thermal catalytic activity, said method comprising:

<u>preparing</u> a metal carrying step of causing said carrier carrying the titania to carry a compound of said metal;

<u>hydrogen</u>, in a heating atmosphere at a first treatment temperature, said compound of the metal carried by said carrier in said metal carrying step; and

an oxidation step of oxidizing, in a heating atmosphere at a second treatment temperature, said metal obtained by hydrogen reduction in said reduction step to thereby enhance activity of said metal.

- 2. (Original) The method according to claim 1, wherein said second treatment temperature is equal to or less than said first treatment temperature.
- 3. (Original) The method according to claim 1, wherein said second treatment temperature falls within a range of 300°C to 600°C.
- 4. (Original) The method according to claim 1, wherein said second treatment temperature falls within a range of 500°C to 600°C.
- 5. (Original) The method according to claim 1, further comprising a temperature adjusting step of setting a temperature of said carrier to said second treatment temperature in an inert gas atmosphere after said reduction step.

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- 6. (Original) The method according to claim 1, wherein said metal is at least one of platinum, rhodium, ruthenium, and nickel.
- 7. (Currently Amended) The method according to claim 6, wherein the content of the platinum falls within a range of 0.04 weight % to 0.5 weight % relative to the weight of the photocatalyst.
- 8. (Original) The method according to claim 1, wherein the content of the titania is 10 weight % or more relative to weight of the photocatalyst.
- 9. (Original) The method according to claim 1, wherein said carrier is a silica bead.
- 10. (Currently Amended) The method according to claim 1, further comprising, prior to said metal carrying step, a step of impregnating into said carrier a first treatment liquid containing titanium tetraisopropoxide tetraalkoxide and isopropyl alcohol;

a step of hydrolyzing a titanium compound impregnated into said carrier to cause said carrier to carry titania; and

a step of calcining said carrier carrying the titania.

- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)

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14. (New) The method according to claim 1, wherein said oxidation step is carried out to obtain fine crystal particles of the metal by cutting bonds in a raft-shaped crystal structure of the metal formed in said reduction step.

15. (New) The method according to claim 1, wherein said oxidation step is carried out in